

**Hansol**

**Mono**  
**72 cells**  
(310~330Watt)

Those who dream of a better future can help lead to a more meaningful and enriched world. As a leading solar module manufacturer in Korea, we never stop to achieve competitiveness through differentiation, implement the maximum value, and commit to sustainable development with customers.

### Key Features

**25**  
years

#### Linear Performance Warranty

10 Years product warranty  
25 Years linear performance warranty

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5,400Pa

#### Certified Durability

5400 Pa snow load  
2400 Pa wind load

**1000V**

#### 1000V

Designed for UL 1000V and IEC 1000V

### Optional Features

**PID**  
FREE

#### PID Free

Anti-PID Cell  
Anti-PID encapsulation technology

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#### Floating PV Installation

Module backside blocks moisture permeability

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#### Power Optimization

Increase the energy output of each individual panel in a system to enhance O&M, shade and age tolerance

R-Black

#### Railless Black Frame

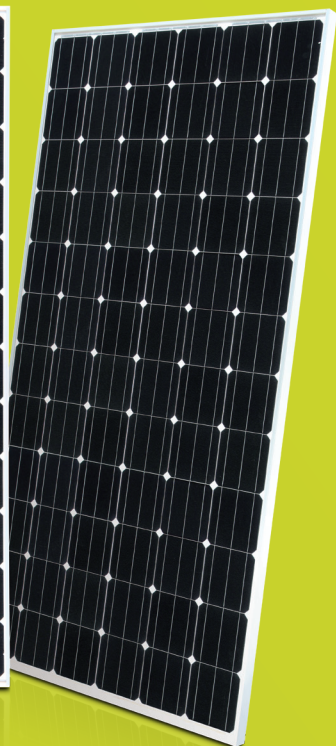
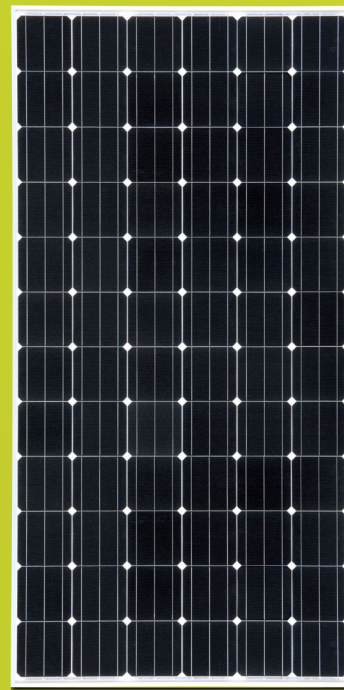
Easy to install / Time saving

### Product Certificates

IEC 61215 / IEC 61730 : TUV / VDE / CE

IEC 61701 Salt Mist Corrosion Level 6

UL 1703 Fire Rating Type 1 and Type 2



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[www.hansoltechnics.com](http://www.hansoltechnics.com)

Everlasting sustainable energy solution provider

# Mono - Crystalline Solar Module (SE-V01)

## 72 cells (310~330Watt)



### Electrical Data / STC (SE-V01) : Irradiance of 1000W/°C, spectrum AM 1.5 and cell temperature of 25°C

| Parameter                | Unit      | 310                       | 315    | 320    | 325    | 330    |
|--------------------------|-----------|---------------------------|--------|--------|--------|--------|
| Nominal Max Power        | Pmax (Wp) | 310                       | 315    | 320    | 325    | 330    |
| Voltage at Pmax          | Vmp (v)   | 37.4                      | 37.5   | 37.6   | 37.7   | 37.8   |
| Current at Pmax          | Imp (A)   | 8.30                      | 8.41   | 8.52   | 8.63   | 8.74   |
| Open Circuit Voltage     | Voc (v)   | 46.0                      | 46.1   | 46.2   | 46.3   | 46.4   |
| Short Circuit Current    | Isc (A)   | 8.88                      | 8.99   | 9.10   | 9.21   | 9.32   |
| Module Efficiency        | %         | 15.55%                    | 15.80% | 16.05% | 16.30% | 16.55% |
| Operating Temperature    |           | -40°C ~ +85°C             |        |        |        |        |
| Max. System Voltage      |           | 1000 Vdc TUV, 1000 Vde UL |        |        |        |        |
| Max. Service Fuse Rating |           | 15A                       |        |        |        |        |
| Max. Reverse Current     |           | 15A                       |        |        |        |        |
| Power tolerance          |           | 0 ~ +4.99W                |        |        |        |        |

### Electrical Data / NOCT (SE-V01) : Irradiance of 800W/°C, spectrum AM 1.5 and ambient temperature of 20°C, wind speed 1m/s

| Parameter             | Unit      | 225.7  | 229.3  | 232.9  | 236.5  | 240.1  |
|-----------------------|-----------|--------|--------|--------|--------|--------|
| Nominal Max Power     | Pmax (Wp) | 225.7  | 229.3  | 232.9  | 236.5  | 240.1  |
| Voltage at Pmax       | Vmp (v)   | 33.8   | 33.9   | 34.0   | 34.1   | 34.2   |
| Current at Pmax       | Imp (A)   | 6.68   | 6.76   | 6.85   | 6.93   | 7.02   |
| Open Circuit Voltage  | Voc (v)   | 41.9   | 42.0   | 42.1   | 42.2   | 42.3   |
| Short Circuit Current | Isc (A)   | 7.18   | 7.27   | 7.36   | 7.45   | 7.53   |
| Module Efficiency     | %         | 11.32% | 11.50% | 11.68% | 11.86% | 12.04% |

### Mechanical Data

|                             |                                           |
|-----------------------------|-------------------------------------------|
| Cell Type                   | Mono-crystalline, 6 inch(156.75*156.75mm) |
| Cell Arrangement            | 72 (6 x 12)                               |
| Dimensions                  | 1994 x 1000 x 40mm                        |
| Weight                      | 22.5kg (49.6 lbs)                         |
| Frame                       | Anodized aluminum                         |
| Front glass                 | 3.2mm Tempered glass                      |
| J-Box                       | IP68, 3 diodes                            |
| Output cable                | (+)1200mm, (-)1200mm, 12 AWG              |
| Connectors                  | MC4 compatible                            |
| Module Fire Performance     | Class C, Type 1 & Type 2                  |
| Stand. Packaging            | 26 pcs (vertical)                         |
| Pallets per Container       | 22                                        |
| Module Pieces per Container | 572                                       |

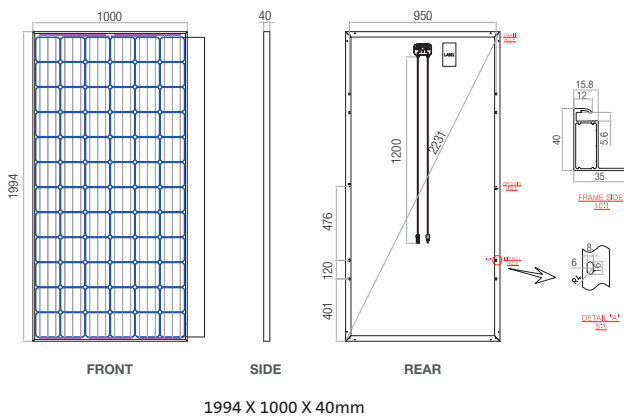
### Warranties

|             |                                       |
|-------------|---------------------------------------|
| Product     | 10 years                              |
| Performance | 10 years performance warranty (>90%)  |
|             | 25 years linear power warranty (>80%) |

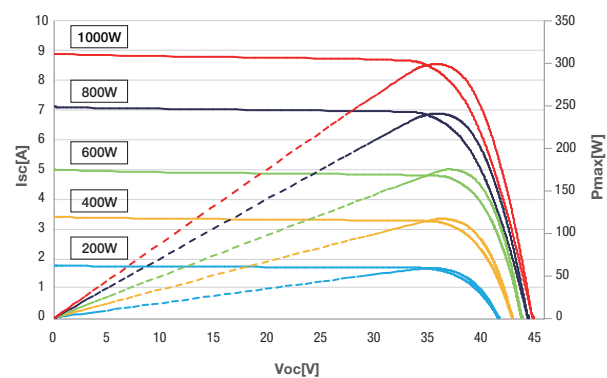
### Temperature Characteristics

| Specifications                    | Data       |
|-----------------------------------|------------|
| Temperature coefficient (Pmax)    | -0.45      |
| Temperature coefficient (Voc)     | -0.33      |
| Temperature coefficient (Isc)     | 0.05       |
| Normal Operating Cell Temperature | 46.0 ± 2°C |

### MODULE DIAGRAM unit : mm (inch)



### I-V Curve according to Irradiance



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The information included in this Module Datasheet is subject to change without notice and is provided for information purposes only.